

### **ABSTRACT (clean)**

A motion compensation method for achieving the reduction of operation workload and the simplification of a hardware configuration includes: interpolation having (i) a first calculation step of calculating base values of sub-pixel values by multiplying coefficients with pixel values of pixels included in a reference picture and (ii) a first rounding step of deriving sub-pixel values of sub-pixels by rounding the base values calculated in the first calculation step instead of directly using the base values in calculating other sub-pixel values; and motion compensation of the reference picture that has interpolated sub-pixels with the derived sub-pixel values.